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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,170	06/13/2001	Eun Chcol Lee	YHK-0066	3664
34610	7590	03/09/2006	EXAMINER	
FLESHNER & KIM, LLP			WU, XIAO MIN	
P.O. BOX 221200			ART UNIT	
CHANTILLY, VA 20153			PAPER NUMBER	

2674

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/879,170	LEE ET AL.	
	Examiner	Art Unit	
	XIAO M. WU	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 18-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10, 13, 14 and 19-23 is/are rejected.
- 7) ☒ Claim(s) 5, 11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
4. Claims 1-4, 6-10, 13-14 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa et al. (US Patent No. 6,288,692) in view of Masumori et al. (US Patent No. 5,168,270).

As to claims 1, 13, 14, 19, 20, Kanazawa discloses a plasma display panel (Fig. 13), comprising: an address electrode (53) included in each discharge cell making a unit pixel (e.g. sub pixel 55 is formed in odd field, and sub pixel 56 is formed in even field) of the plasma display panel; a plurality of second sustain electrodes (X₀, X_e) positioned at each periphery of the

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discharge cell (55, 56) in a direction crossing the address electrode (53) to receive a second sustaining pulse (Fig. 16); and at least one of the first sustain electrodes (51) positioned at the center of the discharge cell (55, 56) in a direction crossing the address electrode (53). It is noted that Kanazawa does not teach the first sustain electrode (51) to receive a first sustaining pulse applied alternatively with respect to the second sustain electrodes and wherein the plurality of second sustain electrodes is unique to each of the discharge cells associated with the address electrode. In other words, Kanazawa teaches interlacing driving for turning on each sub pixels in odd and even fields respectively but fails to disclose that the two sub pixels 55 and 56 are driving simultaneously. Masumori is cited to teach a flat panel display device similar to Kanazawa. Masumori teaches that the display can be driven in two modes. In the double definition display mode the gate driver sequentially drives odd-numbered row lines in odd-numbered frames and even-number row lines in even-numbered frame. In the standard definition display mode every two adjacent row lines are simultaneously driven in a sequential order. It would have been obvious to one of ordinary skill to have modified Kanazawa with the features of driving two row lines simultaneously as taught by Masumori so as to increase the driving speed for a large display screen.

As to claim 2, Kanazawa discloses that the first sustain electrodes (51) are provides between the second sustain electrodes (X_0, X_e).

As to claim 3, Kanazawa discloses a bus electrode arranged in parallel to the first sustain electrode at the center of the first sustain electrode (see Fig. 8).

As to claim 4, Kanazawa discloses bus electrodes arranged in parallel to the first sustain electrode at each edge of the first sustain electrode (Fig. 2).

As to claim 6, Kanazawa discloses a first barrier rib formed in parallel to the address electrode (see Figs. 3 and 10).

As to claims 7 and 8, it is noted that Kanazawa disclose a second barrier rib formed in a direction crossing the first barrier rib and the second barrier rib is provided at an interface of the discharge cells (see Figs. 3 and 10)

As to claims 9, 10, Kanazawa discloses a scan/sustain driver (63, Fig. 13) connected to the first sustain electrode (51) to apply the scanning pulse Fig. 4) and the first sustaining pulse (Fig. 16); and a common sustaining driver (61_o, 61_e, Fig. 13) connected to the second sustain electrode (X_o, X_e) to apply the second sustaining pulse (Fig. 16). Kanazawa further discloses applying a reset pulse (V_w, Fig. 16) to the first sustain electrode (Y).

As to claims 13, 14, note the discussion of claim 1 above, Kanazawa further discloses applying a reset pulse (V_w, Fig. 16) to the second sustain electrode (X_o, X_e) and applying a data pulse (Fig. 16) synchronized with the scanning pulse to the scanning electrode (51).

As to claim 21, Kanazawa discloses the plurality of first sustain electrode are scan electrodes (Y1, Y2, Y3, see Fig. 13).

As to claim 22, Kanazawa discloses the plurality of second sustain electrodes are common sustain electrode (x_o, x_e, ..., Fig. 13).

As to claim 23, Kanazawa discloses there are twice as many second sustain electrodes (x_o, x_e, ..., Fig. 13) than the first electrode (Y1, Y2, Y3, see Fig. 13).

Allowable Subject Matter

3. Claims 5 and 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. Claim 18 is allowed.

Response to Arguments

5. Applicant's arguments with respect to claims 1-4, 6-10, 13-14, 19-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to XIAO M. WU whose telephone number is 571-272-7761. The examiner can normally be reached on 6:30 am to 4:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PATRICK EDOUARD, can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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X.W.
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XIAO M. WU
Primary Examiner
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